# Side View Chip LEDs $0605 < 1.6 \times 1.15 t = 0.55 mm > Low Current Type(IF <math>\leq 10 mA$ )



SMLA12WB \*\*\* Series

Side View



note) "-" will be taken out for emitting color B/E series.

#### ■ Absolute Maximum Ratings (Ta=25°C)

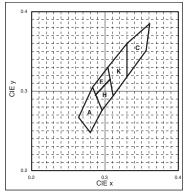
Part No.	Emitting color	Power dissipation P <sub>D</sub> (mW)	Forward current IF (mA)	Peak forward current IFP* (mA)	Reverse voltage V <sub>R</sub> (V)	Operating temperature Topr (°C)	Storage temperature T <sub>stg</sub> (°C)
SMLA12WBC7W	White	66	20	100	5	-30 to +85	-40 to +100

<sup>\*:</sup>Duty ≦1/10 1kHz

#### ■ Electrical Optical Characteristics (Ta=25°C)

Part No.	Resin	Forward voltage V <sub>F</sub>		Reverse current I <sub>R</sub>		Brightness Iv			Chromaticity coordinates		
		Typ. (V)	lF (mA)	Max. (μΑ)	VR (V)	Min. (mcd)	Typ. (mcd)	lF (mA)	х	у	lF (mA)
SMLA12WBC7W	Phosphor included	2.9	5	100	5	22	56	5	0.30	0.30	5

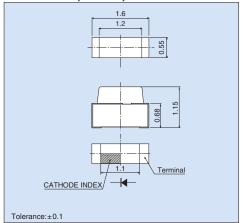
### ■ Chromaticity Diagram



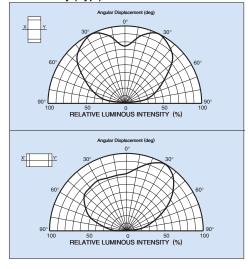
Chromaticity Coordinates (Ta=25°C, IF=5mA)											
-	Α		F		Н		K		С		
х	у	х	у	х	у	х	у	х	у		
0.280	0.248	0.283	0.305	0.287	0.295	0.304	0.330	0.330	0.318		
0.296	0.276	0.304	0.330	0.307	0.315	0.330	0.360	0.356	0.351		
0.283	0.305	0.307	0.315	0.311	0.294	0.330	0.318	0.361	0.385		
0.264	0.267	0.287	0.295	0.296	0.276	0.311	0.294	0.330	0.360		

Measurement tolerance:±0.02

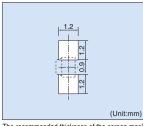
## ■Dimensions (Unit:mm)



## ■ Directivity (Typ.)

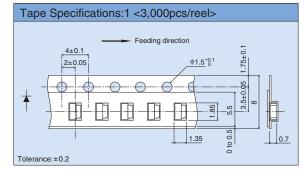


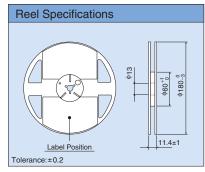
## ■ Recommended Pad Layout



The recommended thickness of the screen mask for soldering is more than 150µm. The hole size of the screen mask should be same as the recommended land pattern or smaller.

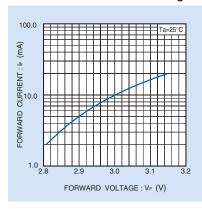
## ■ Packaging Specifications (Unit:mm)





#### **■**Electrical Characteristic Curves

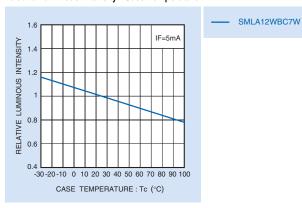
#### **Forward Current - Forward Voltage**



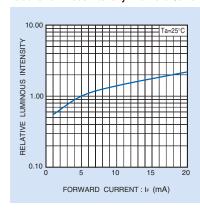
#### Relative Luminous Intensity - Case Temperature

SMLA12WBC7W

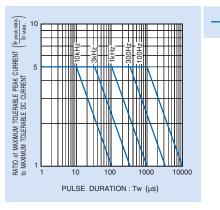
SMLA12WBC7W



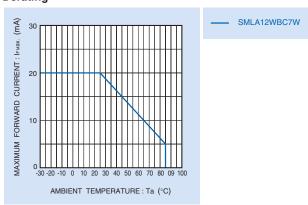
## **Relative Luminous Intensity - Forward Current**



#### Ratio of Maximum Tolerable Peak Current - Pulse Duration



## Derating



SMLA12WBC7W

#### **Notes**

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Appendix-Rev4.1